



United States Environmental Protection Agency
Office of Environmental Measurement & Evaluation
11 Technology Drive
North Chelmsford, MA 01863-2431

Page 1 of 6

Laboratory Results

January 2, 2018

Danielle Gaito - Mail Code OEP06-4

Evan Lewis - Mail Code OEP06-1

US EPA New England R1

Project No: 17110022

Project: Merrymeeting River - New Durham, NH

Analysis: Ammonia as N

EPA Chemist: Bhavita Patel

Date Samples Received by the Laboratory: 11/14/2017

Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England Laboratory SOP for Sample Log-in.

Sample preparation and analysis was done following the EPA Region I SOP, EIASOP-INGAMMO0.

This SOP is based on the Lachat method 10-107-06-1-X and EPA method 350.1 "Determination of Ammonia Nitrogen by Semi Automated Colorimetry, Rev 2.0, August 1993.

Samples were digested using Lachat micodistillation unit. Samples were analyzed on Lachat Automated Ion Analyzer.

Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

Data were reviewed in accordance with the internal verification procedures described in the EPA New England Quality Manual for NERL.

If you have any questions please call me at .

Sincerely,

17110022AMMO

Qualifiers:

RL = Reporting limit

ND = Not Detected above Reporting limit

NA = Not Applicable due to high sample dilutions or sample interferences

NC = Not calculated since analyte concentration is ND.

J = Estimated value

J1 = Estimated value due to MS recovery outside acceptance criteria

J2 = Estimated value due to LFB result outside acceptance criteria

J3 = Estimated value due to RPD result outside acceptance criteria

J4 = Estimated value due to LCS result outside acceptance criteria

E = Estimated value exceeds the calibration range

L = Estimated value is below the calibration range

B = Analyte is associated with the lab blank or trip blank contamination. Values are qualified when the observed concentration of the contamination in the sample extract is less than 10 times the concentration in the blank.

R = No recovery was calculated since the analyte concentration is greater than four times the spike level.

P = The confirmation value exceeded 35% difference and is less than 100%. The lower value is reported.

C = The identification has been confirmed by GC/MS.

A = Suspected Aldol condensation product.

N = Tentatively identified compound.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 3 of 6

Merrymeeting River - New Durham, NH

Ammonia as N

Matrix: Water

Sample Number	Lab ID	Collected	Extracted	Analysis	Concentration ug/L	RL ug/L	Qualifier
Blank			12/11/2017	12/11/2017	ND	66	
Comments:							
MM01	AB71182	11/14/2017 10:41	12/11/2017	12/11/2017	ND	66	
Comments:							
PM01	AB71183	11/14/2017 10:55	12/11/2017	12/11/2017	83	66	
Comments:							
PM02	AB71184	11/14/2017 11:06	12/11/2017	12/11/2017	250	66	J3
Comments:							
MM02	AB71185	11/14/2017 11:24	12/11/2017	12/11/2017	88	66	
Comments:							
MM03	AB71186	11/14/2017 11:37	12/11/2017	12/11/2017	ND	66	
Comments:							
DUP6	AB71187	11/14/2017 0:00	12/11/2017	12/11/2017	200	66	
Comments:							

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 4 of 6

Merrymeeting River - New Durham, NH

MATRIX SPIKE (MS) Results

SAMPLE ID	PARAMETER	SPIKE ADDED ug/L	SAMPLE CONCENTRATION ug/L	MS CONCENTRATION ug/L	MS % REC	QC LIMITS (% REC)
AB71184	Ammonia as N	2000	250	2410	108	85 - 115

Comments:

Laboratory Duplicate Results

SAMPLE ID	PARAMETER	SAMPLE RESULT ug/L	SAMPLE DUP RESULT ug/L	PRECISION RPD %	QC LIMITS (%RPD)
AB71184	Ammonia as N	250	190	27	20

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 5 of 6

Merrymeeting River - New Durham, NH

Laboratory Fortified Blank (LFB) Results

PARAMETER	LFB AMOUNT SPIKED ug/L	LFB RESULT ug/L	LFB RECOVERY %	QC LIMITS %
Ammonia as N	2000	2080	104	90 - 110

Samples in Batch: AB71182, AB71183, AB71184, AB71185, AB71186, AB71187

CHAIN OF CUSTODY RECORD

[illegible]